

Amend
a power supply line connected to the first power supply I/O cell, the second power supply I/O cell, and the internal cell.--

REMARKS

By the foregoing amendment, Claims 1 and 10 have been amended, Claim 2 canceled without prejudice or disclaimer, and new Claim 11 added. Claims 4-9 have been withdrawn from consideration. Thus, Claims 1-3 and 10-11 are currently pending in the application and subject to examination.

In the Office Action mailed December 19, 2002, the Examiner rejected Claim 10 under 35 U.S.C. § 112, second paragraph, as being indefinite. In particular, the Examiner rejected Claim 10 because of the use of the term "unused." Responsive to this rejection, Claim 10 has been amended so as to render the claim definite. If any additional amendment is necessary to overcome this rejection, the Examiner is requested to contact the Applicant's undersigned representative.

The Examiner rejected Claims 1-3 under 35 U.S.C. § 102(e) as anticipated by, or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 6,242,814 to Bassett. It is noted that Claim 1 has been amended. To the extent that the rejection remains applicable to Claim 1, as amended, Applicant hereby traverses the rejection, as follows.

Claim 1, as amended, sets forth a power supply line that provides power supply to an internal cell, wherein a first power supply I/O cell and a second power supply I/O cell are each connected to the power supply line. In this manner, the claimed invention provides the power supply line, and connects both the first power supply I/O cell and the second power supply I/O cell to the power supply line to increase the power supply.

Because of the small size of the I/O cells, a connection between an I/O cell and the power supply line tends to be narrow, which could alone fail to transmit a sufficient electric current. The provision of the second power supply I/O cell, as claimed in Claim 1, makes it possible to provide a sufficient current to the power supply line.

Bassett teaches providing a signal pad, a Vss pad, and a Vdd pad for each I/O cell, and makes it possible to connect only some, but not all of the Vss pads and the Vdd pads to the lead frame by wire-bonding. The wire-bonding to these pad sites can thus be dictated by assembly limitations and the like. Bassett does not teach or suggest providing a power supply to an internal cell, wherein the first power supply I/O cell and the second power supply I/O cell are each connected to a power supply line, as claimed (e.g., Bassett does not expressly teach connecting a first Vdd pad and a second Vdd pad to a single power supply line).

Applicant therefore submits that Claim 1 is allowable over the cited prior art. As Claim 1 is allowable, Applicant submits that Claim 3, which depends from Claim 1, is likewise allowable.

Newly added Claim 11 further clarifies the differences between the semiconductor integrated circuit of the present invention and Bassett, Claim 11 including at least one pad, first and second power supply I/O cells connected by a wire line, an internal cell, and a power supply line connecting the first and second power supply I/O cells and the internal cell. Similarly to as indicated with regard to Claim 1, it is submitted that Bassett does not include each of these limitations, as claimed.

For at least this reason, Applicant submits that newly added Claim 11 is allowable over the prior art of record.

The Examiner rejected Claim 10 under 35 U.S.C. § 102(e) as anticipated by, or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 6,246,122 to Lin. It is noted that Claim 10 has been amended. To the extent that the rejection remains applicable to Claim 10, as amended, Applicant hereby traverses the rejection, as follows.

Lin merely teaches connecting an NC pin 24 to an EDS protection unit 23 via a bonding pad 22, thereby preventing destruction caused by a potential difference between the NC pin 24 and the neighboring pins. Applicant respectfully submits that, contrary to the Examiner's assertion, Lin does not teach using the NC pin 24 as a power supply I/O cell.

Applicant therefore submits that Claim 10 is allowable over the cited prior art.

With regard to each of the rejections under §103 in the Office Action, it is also respectfully submitted that the Examiner has not yet set forth a *prima facie* case of obviousness. The PTO has the burden under §103 to establish a *prima facie* case of obviousness. In re Fine, 5 U.S.P.Q.2nd 1596, 1598 (Fed. Cir. 1988). Both the case law of the Federal Circuit and the PTO itself have made clear that where a modification must be made to the prior art to reject or invalidate a claim under §103, there must be a showing of proper motivation to do so. The mere fact that a prior art reference could arguably be modified to meet the claim is insufficient to establish obviousness. The PTO can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. Id. In order to establish obviousness, there must be a suggestion or motivation in the reference to do so. See also In re Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984) (prior art could not be

turned upside down without motivation to do so); In re Rouffet, 149 F.3d 1350 (Fed. Cir. 1998); In re Dembiczak, 175 F.3d 994 (Fed. Cir. 1999); In re Lee, 277 F.3d 1338 (Fed. Cir. 2002).

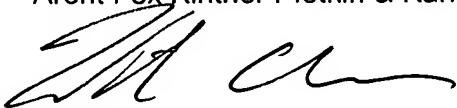
In the Office Action, the Examiner merely states that the present invention is obvious in light of the cited references. See, e.g., Office Action at page 3. This is an insufficient showing of motivation.

For all of the above reasons, it is respectfully submitted that the claims now pending patentability distinguish the present invention from the cited references. Accordingly, reconsideration and withdrawal of the outstanding rejections and an issuance of a Notice of Allowance are earnestly solicited.

Should the Examiner determine that any further action is necessary to place this application into better form, the Examiner is encouraged to telephone the undersigned representative at the number listed below.

Respectfully submitted,

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Enclosures: Marked-Up Version of Amended Claims
Petition for Extension of Time (one month)

MARKED-UP VERSION OF AMENDED CLAIMS

1. (Amended) A semiconductor integrated circuit, comprising:

pads;

a first power supply I/O cell which is connected to an external pin through a corresponding one of said pads; [and]

a second power supply I/O cell which is not connected to an external pin through a corresponding one of said pads, but receives a power supply from said first power supply I/O cell;

an internal cell; and

a power supply line which provides the power supply to said internal cell, wherein

said first power supply I/O cell and said second power supply I/O cell are each

connected to said power supply line.

10. (Amended) A semiconductor integrated circuit, made by a designing process that comprises:

identifying an [unused] I/O cell having no external connection; and

assigning the identified I/O cell to be a power supply I/O cell having no direct external connection.